

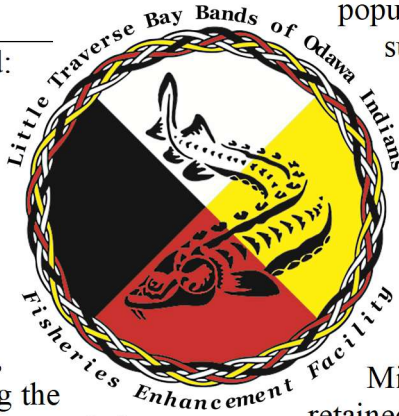
Little Traverse Bay Bands of Odawa Indians Nmé Restoration Efforts

Why Lake Sturgeon?

The Lake Sturgeon or Nmé (pronounced: ná may) is a culturally significant species to the Odawa people and Native American communities across North America. The Nmé are one of the oldest of the seven clan species in the Great Lakes region. Traditionally, we look to the Nmé clan members for wisdom and guidance. Traditionally, there was a celebration and a feast along the river banks during the Nmé's migration to their spawning ground, signaling the arrival of Spring. During this spawning run people would harvest and smoke sturgeon to support their families for the up and coming year. Nmé were a celebrated part of the lake and culture.

Today, it is pretty uncommon to have encountered a Lake Sturgeon in the wild, most people in the state of Michigan have never seen a sturgeon in person. Lake Sturgeon once numbered in the millions across the Great Lakes Basin. Rough estimates of historic sturgeon densities by the late 1880s ranged from over 1.1 million in Lake Erie, to 385,000 in Lake Michigan. In the late 1860s through the 1880's commercial fishing; pollution and the installation of dams on every major river in the basin caused a catastrophic collapse of the species.

Today we are fortunate that several populations were able to avoid extirpation. In Lake Michigan's Green Bay area, including the Fox and Menominee Rivers,



populations of several thousand individuals survived. But, the remaining parts of Lake Michigan were not so fortunate. By 2012, rivers that once held thousands of sturgeon held fewer than 500 and most were fewer than 25 individuals. These rivers include the St. Joseph, Kalamazoo, Grand, Muskegon, Manistee, Manistique, and the Cedar Rivers. Excluding Green Bay, Lake Michigan's North and East Shore only retained roughly 900 individuals. By comparison, in 2012, Black Lake in Cheboygan County was estimated to have roughly 1,125 individuals.



Age-0 Lake Sturgeon in the LTBB stocking truck ready for release into the Sturgeon River.

Fortunately, restoration efforts across the basin began in the 1980s and have increased substantially in the past 5 to 10 years. Large Lake Michigan rivers such as the Kalamazoo, Grand, Muskegon, Manistee, and Cedar have stocking programs that include sturgeon rearing trailers.

LTBB Sturgeon Management & Research

For LTBB, the focus is to restore the sturgeon populations in the Ceded Territory, starting with Burt Lake. This population may have had thousands of adult fish prior to 1900, but a recent estimate conducted in 2015 by LTBB and partner agencies and organizations, found very few individuals. Calculations from this effort put the populations somewhere between -1,000 and infinity, but the average or middle was around ~650 total fish over the age of 5. With so few



LTBB Environmental Specialist, Jon Mauchmar, holding a 3 year old Lake Sturgeon from the 2015 Burt Lake

Little Traverse Bay Bands of Odawa Indians Nmé Restoration Efforts

individuals in such a large lake, the statistics have relatively low confidence.

In response to the low population, the LTBB Fisheries Enhancement Facility (Hatchery) has been working in cooperation with Michigan State University and the Michigan Department of Natural Resources; as well as the Burt Lake Preservation Association's Sturgeon Club and Sturgeon for Tomorrow to restore the Lake Sturgeon population in Burt Lake.



Figure 1: Adult Lake Sturgeon being PIT tagged during the 2015 Burt Lake population estimate.

Since 2013, LTBB has released 5,953 fingerling sturgeon into the Burt Lake system. Of the 5,953 fingerlings, 4,567 have been stocked in the Sturgeon River, at or upstream of Wolverine in hopes to improve their chances of imprinting and returning to the river when they mature.

LTBB Nmé In the Classroom

A major component to any successful restoration is public engagement and education. An educated community gives the sturgeon the best chance for success and to avoid the problems of the past (lack of care/concern for the species). It is for this reason; LTBB is reaching out to local schools to bring this culturally significant fish back to the local waterways and back into our hearts of our community members. We believe this multi-generational restoration should



Pellston High School Nmé Program class of 2019

start with the next generation, and there is no time like the present.

The Nmé in the Classroom Program includes a curriculum developed by the LTBB Education Department, and invests in Place-Based-Learning for schools to learn not only about Lake Sturgeon, the Odawa culture, and natural resources; but also about the impacts of society's actions or feelings toward a species.

By bringing sturgeon into the classroom, we quite literally brings the students closer to the natural world. In turn this project gives students the opportunity to grow and develop life long bonds with the world around them. Which LTBB believes is a staple of a strong community.



Figure 2 Pellston High School's Nmé 2018; Big Mike & Long John Silver